Oregon
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Mr. Christopher Cora
US Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle WA 98101

RE: Oregon DEQ Comments on Draft Final Remedial Investigation and Risk Assessment Reports, both dated September 1, 2010

Dear Mr. Cora:

The Department of Environmental Quality (DEQ) has the following comments on the Draft Final Remedial Investigation for the Harbor Oil site. While the RI report documents significant progress for the site, based on the general comments herein, DEQ concludes the remedial investigation is incomplete. Because we believe additional characterization and evaluation is necessary, we recommend a meeting with stakeholders to discuss path forward for the site.

GENERAL COMMENTS

Source Control

A source control evaluation consistent with Oregon DEQ's Guidance for Evaluating the Stormwater Pathway at Upland Sites should be completed (DEQ 2009). The vertical distribution of PCBs and pesticides in Force Lake sediment shows that PCB levels are higher in surficial sediment relative to the deeper samples. This pattern does not support a historic-only source. The existing stormwater discharge is operating under NPDES 1200-COLs industrial stormwater discharge permit. However, the permit does not monitor for specific contaminants of concern identified at the site, notably PCBs and DDT and metabolites. This issue is important to prevent ongoing releases that may increase contamination, and also because stormwater discharges provide a mechanism for potential recontamination if a remedy at Force Lake were to be implemented.

Sediment Characterization

Many of the risk assessment conclusions rely on 11 discrete sediment samples collected in Force Lake. Risk conclusions are developed from these sediments result using literature-derived uptake factors, with risk models built on top of estimated fish tissue concentrations. This desktop modeling approach is subject to considerable uncertainty, and is dependent on the original sediment data.

DEQ previously commented that the sediment results for Aroclors are based on EPA method 8082 with an electron capture detector. It is our understanding that DDT and metabolites and PCB compounds can co-elute by gas chromatography and cause interference by the electron capture detector method. Moreover, according to EPA's superfund basic research program, the method relies on pattern matching. If the basic Aroclor patterns are not matched, PCBs are not quantified. Given that PCBs in Force Lake are weathered, there is potential that some of these PCBs will not match the quantification standards. Given the importance of both PCBs and DDT metabolites for this site, the use of high-resolution methods to quantify these compounds is warranted to improve confidence in quantification of PCBs and DDT

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compounds in sediment, and by extension, risk interpretation. Further, the high resolution methods have lower detection limits and will more accurately estimate total PCB concentrations.

Fish Tissue Analytical Chemistry

Our concerns with respect to sediment chemistry could be partially addressed by using chemistry data in fish tissue to validate the constituents of interest in fish tissue, and address concern about relatively limited sediment data as it relates to bioaccumulation potential. However, tissue data are not available.

Exceedances of Sediment Toxicity Criteria

Many substances in Force Lake sediment exceeded toxicity-based screening criteria. Notably, DDT and metabolites DDE and DDD exceed the Macdonald et. al. probable effects concentration (PEC) or Probable Effects Level (PEL) in sediment, as shown in Table 5-1 of the ecological risk assessment. The PEC is interpreted as level above which adverse effects are more likely than not. The response to comments on this topic indicates that bioassays are unwarranted, based on a subjective interpretation which DEQ does not support, that the presence of a relatively high level of organic carbon in sediment reduces bioavailability. DEQ continues to disagree that bioassays are unwarranted, since the PECs/PELs are exceeded, and there remains significant uncertainty regarding sediment characterization.

Constituents of Interest

Given the site history of fires and the presence of PCBs and oil burning, polychlorinated dibenzo-dioxins and furans should be constituents of interest for the site.

Applicability of State ARARs

Risks predicted by the human health risk assessment exceed those that would be considered unacceptable by State cleanup criteria. For example, the levels of PCBs detected in Force Lake exceed those that could be considered a hotspot under State rules and guidance. DEQ requests that EPA consider applicability of State ARARs when interpreting the remedial investigation and risk assessments.

SPECIFIC COMMENT – RI

The existing sediment data show that Force Lake PCB levels range from non-detect to 130 ug/kg. In Section 4.4.3.2 of the RI, these levels are compared to urban catch basin sediments. Similarly, DDT levels in Force Lake are compared to urban catch basins in Section 4.6.4.5. DEQ believes these comparisons are inappropriate since catch basin sediments do not represent an aquatic environment. They are typically the subject of source control investigations, with the objective of preventing catch basin PCBs or pesticides from reaching waterways. Force Lake sediments represent an aquatic environment that we would be intending to protect, rather than a source area where source control measures could be implemented to prevent migration to ecological habitat.

DEQ would like to request a meeting with US EPA to discuss the path forward for the site and approaches to address stakeholder concerns. If you would like to discuss any of the above comments in more detail please contact me at 503-667-8414 x55002 or at paul.seidel@state.or.us .

Sincerely,

Paul Seidel

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